

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): MAIER et al. )  
)  
Patent No.: 7,919,081 B1 )  
)  
Issued: April 5, 2011 )  
)  
For: HYDROGENASE DEFICIENT BACTERIAL STRAINS

**REQUEST FOR CERTIFICATE OF CORRECTION**

Attention Certificate of Corrections Branch  
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Sir:

A Certificate of Correction is requested to be issued correcting printing errors appearing in the above-identified United States patent. A copy of the text noting the corrections for the Certificate is enclosed. Since the errors listed are due to Applicants' mistake, please charge Deposit Account No. 13-4895 in the amount of \$100 to cover the Certificate fee under 37 C.F.R. §1.20(a). The corrections in the proposed Certificate of Correction do not involve such changes in the patent as would constitute new matter or would require reexamination.

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on this 29 day of April, 2011.

By: Sandy Truehart  
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April 29, 2011  
Date

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UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO.: 7,919,081 B1  
DATED: April 5, 2011  
INVENTOR(S): Maier et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the face page under (73) Assignee:

add

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PATENT NO. 7,919,081

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US007919081B2

(12) **United States Patent**  
**Maier et al.**

(10) **Patent No.:** **US 7,919,081 B2**  
(45) **Date of Patent:** **Apr. 5, 2011**

(54) **HYDROGENASE DEFICIENT BACTERIAL STRAINS**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 540 days.

(21) Appl. No.: **10/591,203**

(22) PCT Filed: **Feb. 28, 2005**

(86) PCT No.: **PCT/US2005/006638**

§ 371 (c)(1),  
(2), (4) Date: **Jun. 22, 2007**

(87) PCT Pub. No.: **WO2005/086669**

PCT Pub. Date: **Sep. 22, 2005**

(65) **Prior Publication Data**

US 2009/0081257 A1 Mar. 26, 2009

## Related U.S. Application Data

(60) Provisional application No. 60/549,306, filed on Mar. 2, 2004, provisional application No. 60/604,846, filed on Aug. 26, 2004.

(51) **Int. Cl.**

**A01N 63/00** (2006.01)  
**A61K 48/00** (2006.01)  
**A61K 39/00** (2006.01)  
**A61K 39/02** (2006.01)  
**C12N 1/20** (2006.01)  
**C12N 15/87** (2006.01)

(52) **U.S. Cl.** ..... **424/93.48; 424/93.2; 424/200.1; 424/184.1; 424/234.1; 435/252.8; 435/461; 435/879**

(58) **Field of Classification Search** ..... None  
See application file for complete search history.

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## ABSTRACT

The present disclosure describes pathogenic bacteria that have been modified to be deficient in NiFe hydrogenase activity; compositions comprising such modified bacteria, and the use of such bacteria to protect animals from pathogenic enteric bacterial infections.

3 Claims, 4 Drawing Sheets